IN THE CLAIMS

Please amend the following claims.

1. (currently amended) A process comprising:

forming a metal interconnect structure <u>having at least one via and at least one</u> interconnect onto a substrate, said metal interconnect structure extending above a surface of said the substrate;

forming, subsequent to said forming <u>said</u> a metal <u>interconnect</u> structure, a carbon-doped oxide (CDO) layer with a first concentration of carbon dopants therein on said substrate and <u>filling entirely</u> between elements of said metal <u>interconnect</u> structure; and

continuing to form, subsequent to said forming <u>said</u> a CDO layer with <u>said</u> a first concentration of carbon dopants, said CDO layer further above said metal interconnect structure with a second concentration of carbon dopants therein, wherein <u>said</u> the first concentration is higher than <u>said</u> the second concentration.

2. (currently amended) The process according to Claim 1 further comprising:

forming, subsequent to said <u>forming said second concentration of carbon dopants</u>, <u>continuing to form</u>, <u>said</u> the CDO layer further with a third concentration of carbon dopants therein, wherein there is a linear correlation of <u>said</u> the concentration of carbon dopants between <u>said</u> the first concentration, <u>said</u> the second concentration, and <u>said</u> the third concentration.

3. (currently amended) The process according to Claim 1 further comprising:

forming <u>said</u> the CDO layer further with a third concentration of carbon dopants therein, wherein <u>said</u> the first and third concentrations are higher than <u>said</u> the second concentration.

4. (currently amended) The process according to Claim 1 further comprising:

forming <u>said</u> the CDO layer further with a third concentration of carbon dopants therein, wherein <u>said</u> the first and third concentrations are lower than <u>said</u> the second concentration.

5-6. (cancelled)

7. (currently amended) A process comprising:

forming a carbon-doped oxide (CDO) layer with a concentration of carbon dopants therein;

wherein the concentration varies substantially linearly from a higher concentration in an initially-deposited portion of the CDO layer to a lower concentration in a subsequently-deposited portion of the CDO layer.

forming a first layer of carbon-doped oxide (CDO) on a substrate, said first layer of CDO having a first concentration of carbon dopants therein;

forming a second layer of CDO having a second concentration of carbon dopants therein above said first layer of CDO; and

forming a third layer of CDO having a third concentration of carbon dopants therein above said second layer of CDO, wherein said first concentration and said third concentration are higher than said second concentration.

8-9. (cancelled)

10. (currently amended) A process comprising: The process according to Claim 7 wherein the concentration varies between about 1 percent and about 20 percent by atomic mass.

forming a first layer of carbon-doped oxide (CDO) on a substrate, said first layer of CDO having a first concentration of carbon dopants therein;

forming a second layer of CDO having a second concentration of carbon dopants therein above said first layer of CDO; and

forming a third layer of CDO having a third concentration of carbon dopants therein above said second layer of CDO, wherein said first concentration and said third concentration are lower than said second concentration.

11-30. (cancelled)